Claims

1. A method of conducting polymerizations in nonaqueous miniemulsions,
characterized in that
a miniemulsion is produced from reactants of a polymerization in a nonaqueous fluid dispersing medium, using a surfactant and an osmotically stabilizing component, and is reacted.

2. The method as claimed in claim 1,
characterized in that
the polymerization is selected from addition polymerization reactions, polyaddition reactions, and polycondensation reactions.

3. The method as claimed in claim 2,
characterized in that
the polymerizations comprises an addition polymerization of acrylic and/or styrene monomers.

4. The method as claimed in claim 2,
characterized in that
the polymerization comprises a polyaddition of polyfunctional epoxides with hydroxy, amino and/or thiol compounds.

5. The method as claimed in claim 2,
characterized in that
the polymerization comprises a polyaddition of polyfunctional isocyanates with polyfunctional hydroxy and/or amino compounds.

6. The method as claimed in claim 2,
charact rized in that
the polymerization comprises a polycondensation of polyfunctional carboxylic acids with poly-functional hydroxy and/or amino compounds.

7. The method as claimed in any of claims 1 to 6, **characterized in that** a miniemulsion is formed from a disperse phase of polar reactants in a continuous apolar organic phase.

8. The method as claimed in claim 7, **characterized in that** hydrophilic substances, especially water and/or salts, are used as osmotically stabilizing component.

9. The method as claimed in any of claims 1 to 6, **characterized in that** a miniemulsion is formed from a disperse phase of apolar reactants in a continuous polar organic phase.

10. The method as claimed in claim 9, **characterized in that** hydrophobic substances are used as osmotically stabilizing component.

11. The method as claimed in any of the preceding claims, **characterized in that** the osmotically stabilizing component is added in an amount of from 0.1 to 40% by weight based on the overall weight of the emulsion.

12. The method as claimed in any of the preceding claims, **characterized in that** the average particle size of the emulsion is situated in the range from 30 to 600 nm.

13. The method as claimed in any of the preceding claims,

characterized in that
an emulsion is produced which is critically stabilized or thermodynamically stable with respect to an alteration in particle size.

14. The method as claimed in any of the preceding claims,
characterized in that
the emulsion further comprises - dispersed therein - particulate solids.

15. The method as claimed in any of the preceding claims,
characterized in that
the polymerization takes place without substantial alteration in the particle size.

16. A method of conducting inorganic polymerizations in nonaqueous miniemulsions,
characterized in that
a miniemulsion of at least one of the reactants of an inorganic polymerization is produced and reacted.

17. The method as claimed in claim 16,
characterized in that
the inorganic polymerization comprises a preparation of metal salt particles, metal oxide particles or metal sulfide particles.

18. The method as claimed in claim 16 or 17,
characterized in that
a miniemulsion is formed from a disperse phase of an apolar reactant in a continuous polar organic phase.

19. The method as claimed in claim 16 or 17,
characterized in that

a miniemulsion is formed from a disperse phase of a polar reactant in a continuous apolar organic phase.

20. The method as claimed in any of claims 16 to 19, **characterized in that** the reaction takes place by addition of a further reactant of the inorganic polymerization by way of the continuous phase of the emulsion.

21. The method as claimed in any of claims 16 to 19, **characterized in that** the reaction takes place by addition of a further reactant of the inorganic polymerization by way of a further miniemulsion.

Add A1

New claim 16

16. The method as claimed in claim 1,
characterized in that
an inorganic polymerization is conducted in which a miniemulsion is produced from at least one of the reactants of an inorganic polymerization and is reacted.